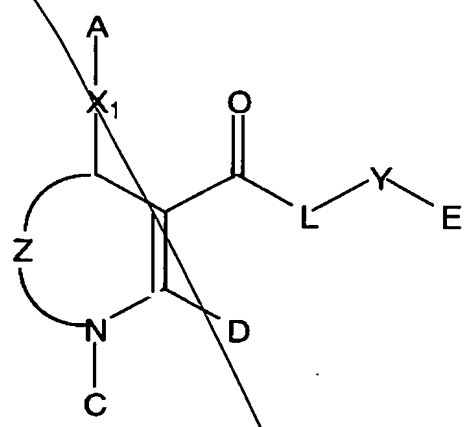
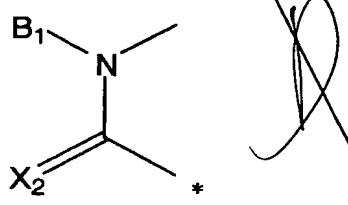


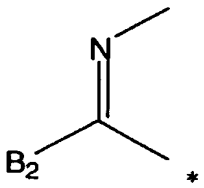
(1)

wherein Z represents a group of the following formula (Z_1) or (Z_2), which is bonded to the nitrogen atom at a symbol "*".

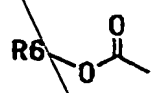
(Z1)

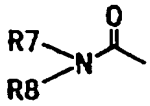


(Z2)



wherein B_1 represents hydrogen atom, a lower alkyl group which optionally contains a hetero atom in the chain thereof, a lower alkylcarbonyl group, only when L represents oxygen atom, Y represents an interatomic bond and E represents hydrogen atom, an benzyl group, a pyridylmethyl group, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group, a lower alkyloxycarbonyl-lower alkyl group or a group of the following formula (3) or (4):

(3) 

(4) 

wherein R^6 to R^8 each represent hydrogen atom, a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted phenyl group, a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl, a furyl, and a thienyl, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, a benzyl, a 3-phenylpropyl group, a 3-phenyl-2-propane-1-yl group, a 3,3-diphenylpropyl group, a 3-(pyridine-2-yl) propyl group, a 3-(pyridine-2-yl)-2-propene-1-yl group, a cyano-lower alkyl group or a cyano-lower alkenyl group, the chains of R^6 to R^8 optionally contain a hetero atom and R^7 and R^8 may together form a ring selected from the group consisting of piperidine-1-yl, piperidine-4-yl, pyrrolidine-1-yl, pyrrolidine-3-yl, piperidinone-1-yl, pyrrolidizone-1-yl, piperazine-1-yl and morpholine-4-yl, with the proviso that when R^6 to R^8 each represent a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted phenyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, a benzyl, a 3-phenylpropyl group, a 3-phenyl-2-propane-1-yl group, a 3-(pyridine-2-yl) propyl group, or, a 3-(pyridine-2-yl)-2-propene-1-yl group wherein the

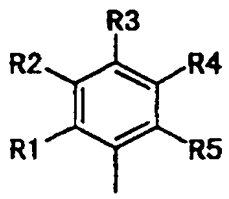
substituents in the substituted phenyl, pyridyl, furyl and thienyl groups are those described later with reference to R^1 to R^5 in general formula (2), L must be oxygen atom, Y must be an interatomic bond and E must be hydrogen atom;

B_2 represents an amino group, a lower alkyl group, a lower alkylamino group, a lower alkylthio group, benzyl group, a pyridylmethyl, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group and wherein the substituents in the substituted phenyl, pyridyl, furyl and thienyl groups are halogen atoms, hydroxyl group, carboxyl group, amino group, cyano group, nitro groups, lower alkyl groups, lower alkoxyl groups, halogeno-lower alkyl groups, hydroxyl-lower alkyl groups and lower-alkoxycarbonyl groups;

X_2 represents oxygen atom or sulfur atom;

A represents a group of the following formula (2), or a substituted or unsubstituted l-naphthyl, 2-naphthyl, indole-2-yl, indole-3-yl, thiophene-3-yl, thiophene-2-yl, furan-3-yl, furan-2-yl, pyridine-4-yl, pyridine-3-yl or pyridine-2-yl group wherein the substituents in these groups are those described later with reference to R^1 to R^5 in general formula (2):

(2)



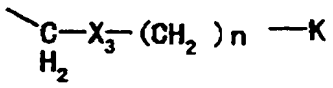
wherein R^1, R^2, R^3, R^4 and R^5 may be the same or different from each other and each

represent hydrogen atom, a halogen atom, hydroxyl group, carboxyl group, amino group, cyano group, nitro group, a lower alkyl group, a lower alkoxyl group, a lower alkylamino group, a lower alkylthio group, a lower alkanoyl group, a lower alkoxycarbonyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkoxyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkoxyl group, an amino-lower alkyl group, an amino-lower alkoxyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkoxyl group, a carboxy-lower alkenyl group, a benzyloxy group, a benzoyl, or a pyridylcarbonyl group,

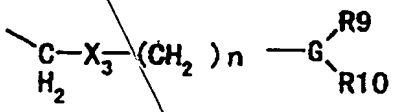
C represents hydrogen atom, a lower alkyl group, a hydroxy-lower alkyl group, a benzyl group, a pyridylmethyl group, an amino-lower alkyl group or a carboxy-lower alkyl group;

D represents hydrogen atom, a lower alkyl group, dimethoxymethyl group, cyano group, a benzyl group, a pyridylmethyl group, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group or a group of the following formula (5) or (6):

(5)



(6)



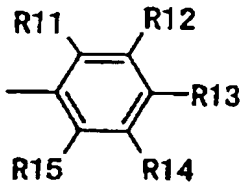
wherein X_3 represents O, S or N-$R^{8'}$, n represents an integer of 0 to 6, K in general formula (5) represents hydrogen atom, a halogen atom, hydroxyl group, carboxyl group,

amino group, cyano group, nitro group, azido group, a substituted or unsubstituted phenyl group or a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group and wherein the substituents in these groups are those described later with reference to R^1 to R^5 in general formula (2), G in the formula (6) represents N or C-H, wherein $R^{8'}$ to R^{10} may be the same or different from each other, and they each represent hydrogen atom, a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted phenyl group, a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, an benzyl group, a pyridylmethyl group, a cyano-lower alkyl group or a cyano-lower alkenyl group, and the chains may contain a hetero atom wherein the substituents in the substituted phenyl, pyridyl, furyl and thienyl groups of $R^{8'}$ are halogen atoms, alkyl groups, and alkoxyl groups and the substituents in the substituted phenyl, pyridyl, furyl and thienyl groups of R^9 and R^{10} are those described later with reference to R^1 to R^5 in general formula (2), or R^9 and R^{10} may together form a ring selected from the group consisting of a cyclopentyl group, a cyclohexyl group, a piperidine-1-yl group, a piperidine-4-yl group, a pyrrolidine-1-yl group, a pyrrolidine-3-yl group, a piperidinone-1-yl group, a pyrrolidinone-1-yl group, a piperazine-1-yl group and a morpholine-4-yl group;

E represents hydrogen atom, only when L represents oxygen atom and Y represents an

interatomic bond, a group of the following general formula (7), a substituted or unsubstituted heteroaryl group, wherein said heteroaryl is selected from the group consisting of a thiophene-3-yl group, a thiophene-2-yl group, a furan-3-yl group, a furan-2-yl group, a pyridine-4-yl group, a pyridine-3-yl group, a pyridine-2-yl group, and an imidazole-1-yl group, cyclopentyl group, cyclohexyl group, pyrrolidinone-1-yl group or piperidinone-1-yl group wherein the substitutents in these heteroaryl groups are halogen atoms, alkyl groups, and alkoxyl groups, when E represents cyclopentyl group, cyclehexyl group, pyrrolidinone-1-yl group or piperidinane-1-yl group, Z is a group having the formula (Z_2):

(7)



wherein R^{11}, R^{12}, R^{13}, R^{14} and R^{15} may be the same or different from each other and each represent hydrogen atom, a halogen atom, hydroxyl group, carboxyl group, amino group, cyano group, nitro group, a lower alkyl group, a lower alkoxyl group, a lower alkylamino group, a lower alkylthio group, a lower alkanoyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkoxyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkoxyl group, an amino-lower alkyl group, an amino-lower alkoxyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkoxyl group, a carboxy-lower alkenyl group, benzyl group, benzyloxy group, a lower alkoxycarbonyl group,

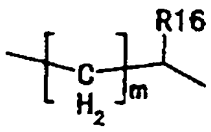
benzoyl, pyridylcarbonyl group, a substituted or unsubstituted phenyl group, a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group, or cyclopentyl group, cyclohexyl group, piperidyl group, pyrrolidinyl group and piperadinyl group wherein the substituents in the substituted phenyl, pyridyl, furyl and thienyl groups are halogen atoms, alkyl groups, and alkoxyl groups,

X_1 represents an interatomic bond, $-CH_2-$, $-CH_2CH_2-$, -CH=CH- or -C≡C-,

L represents >N-F or oxygen atom, only when Z represents Z_1,

wherein F represents hydrogen atom or a lower alkyl group which may contain a hetero atom in the chain thereof, a hydroxy-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group or a lower alkyloxycarbonyl-lower alkyl group,

Y represents an interatomic bond, only when L represents oxygen atom and E represents hydrogen atom, a saturated or unsaturated linear hydrocarbon group having 1 to 6 carbon atoms, which may contain a hetero atom in the group thereof, or a group of the following formula (8):

(8) 

wherein R^{16} represents hydrogen atom, a substituted or unsubstituted, saturated or unsaturated linear, branched or cyclic hydrocarbon group having 1 to 6 carbon atoms, a

substituted or unsubstituted phenyl group, a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, benzyl group, a pyridylmethyl group, a cyano-lower alkyl group or a cyano-lower alkenyl group, and the chains of R^{16} optionally contain a hetero atom, when Z is a group represented by the formula (Z_1), R^{16} is a substituted or unsubstituted phenyl or a heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl group, a furyl group, and a thienyl group, and m represents an integer of 0 to 5 wherein the substituents in the substituted phenyl, pyridyl, furyl and thienyl groups are halogen atoms, alkyl groups, and alkoxyl groups.

6. (Amended) The dihydropyrimidine derivatives, tautomers thereof and pharmaceutically acceptable salts thereof according to claim 1, wherein Z represents Z_1, L represents >N-F, A represents a group of general formula (2), B_1, C and F each represent hydrogen atom, D represents a lower alkyl group, E represents a group of general formula (7), X_1 represents an interatomic bond and Y represents a group of general formula (8) wherein m represents an integer of 1 to 4 and R_{16} represents a substituted or unsubstituted phenyl group.

11. (Amended) The dihydropyrimidine derivatives, tautomers thereof and pharmaceutically acceptable salts thereof according to claim 1, wherein Z represents Z_1, L represents >N-F, A represents a group of general formula (2), B_1, C and F each represent hydrogen atom, D represents a lower alkyl group, E represents a group of general formula (7),

X_1 represents an interatomic bond and Y represents a group of general formula (8), wherein m represents an integer of 1 to 4 and R_{16} represents a substituted or unsubstituted phenyl group, or a saturated or unsaturated hydrocarbon group having 3 or 4 carbon atoms.

17. (Amended) The dihydropyrimidine derivatives, tautomers thereof and pharmaceutically acceptable salts thereof according to claim 1, wherein Z represents Z_2, L represents >N-F, C represents hydrogen atom, A represents a group of general formula (2), E represents a group of general formula (7), F represents hydrogen atom, X_1 represents an interatomic bond and B_2 represents a substituted or unsubstituted phenyl group or a substituted or unsubstituted heteroaryl group, wherein said heteroaryl group is selected from the group consisting of a pyridyl, a furyl, and a thienyl.

19. (Amended) The dihydropyrimidine derivatives, tautomers thereof and pharmaceutically acceptable salts thereof according to claim 1, wherein Z represents Z_2, L represents >N-F, C represents hydrogen atom, A represents a group of general formula (2), E represents a group of general formula (7), F represents hydrogen atom, X_1 represents an interatomic bond and Y represents a group of general formula (8), wherein m represents an integer of 1 to 4 and R_{16} represents a substituted or unsubstituted phenyl group.

21. (Amended) The dihydropyrimidine derivatives, tautomers thereof and pharmaceutically acceptable salts thereof according to claim 1, wherein Z represents Z_2, L represents >N-F, C represents hydrogen atom, A represents a group of general formula (2), D represents a group of general formula (6), wherein X_3 represents oxygen atom, n represents an integer of 2 or 3 and R_9 and R_{10}, bonded together to form a 5- to 7-membered ring together with G, E represents a group of general formula (7), F represents hydrogen atom, X_1

represents an interatomic bond and Y represents a group of general formula (8), wherein m represents an integer of 1 to 4 and R_{16} represents a substituted or unsubstituted phenyl group, or an unsaturated hydrocarbon group having 3 or 4 carbon atoms.

38. (Amended) The method of Claim 33, wherein said disease is pain caused by spinal injury, pain caused by diabetes, pain caused by thromboangitis obliterans, postoperative pain, migraine or visceral pain.

Please add the following new claims:

41. (New) A method of treating a patient suffering from a pain caused by thromboangiitis obliterans, postoperative pain, migraine or visceral pain, which comprises administering a compound of claim 1 to said patient.

BASIS FOR THE AMENDMENT

Claims 1, 6, 11, 17, 19, 21, and 38 have been amended.

Claim 41 has been added.

The amendment of Claim 1 is supported by page 12, lines 11-15; page 12, line 24 to page 13, line 1; page 13, lines 22-26; page 15, lines 8-14; page 15, line 26 to page 16, line 7; page 16, lines 21-25; page 17, lines 17-26; and page 18, lines 17-19. The amendment of Claims 6, 11, 17, 19, and 21 are supported by page 12, lines 9-10. The amendment of Claim 17 is also supported by page 12, line 13. The amendment of Claim 38 is supported by page 1, lines 14-16. New Claim 41 is supported by original Claim 30.

No new matter is believed to have been entered by the present amendment.